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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

915-007.056

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on March 27, 2009Signature Marilyn O'ConnellTyped or printed name Marilyn O'Connell

Application Number

10/705,759

Filed

November 10, 2003

First Named Inventor

Jan HIRSIMAKI

Art Unit

2144

Examiner

Umar Cheema

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)☒

attorney or agent of record.

Registration number 31,391☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

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Typed or printed name

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Telephone number

March 27, 2009

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐

*Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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915-007.056
Serial No. 10/705,759

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of:

Jan HIRSIMAKI

Serial No.: 10/705,759

Examiner: Umar CHEEMA

Filed: November 10, 2003

Group Art Unit: 2144

For: IMPROVING THE TRANSMISSION PERFORMANCE OF A TRANSPORT LAYER
PROTOCOL CONNECTION

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Pre-Appeal Brief Request for Review

Sir:

This Pre-Appeal Brief Request for Review is filed in response to the final Office Action
of February 3, 2009.

CERTIFICATE OF MAILING

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Marilyn O'Connell
Marilyn O'Connell

Dated: March 27, 2009

Claim Rejection- 35 U.S.C. § 103

At page 2 of the Office Action, claims 1-3, 6-16, 18-22 and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter AAPA), in view of Apisdorf et al (US 6,480,977, hereinafter Apisdorf).

With respect to claims 1, 19, 20 and 33, it is asserted in sections 3 and 26 of the Office Action that the AAPA discloses in invention as claimed a method, an apparatus, a mobile terminal and a system comprising: monitoring transport layer data traffic in relation to transmission capacity of a transport layer protocol connection that uses a data transmission service of a bearer, and dynamically adjusting said transmission capacity of said bearer according to said monitored data traffic of said transmission connection wherein said bearer provides uplink and downlink transmission capacity, (the Examiner referring to Figure 1 and associated details wherein transmission service is offered to the TCP (Transport Control Protocol) layer by the bearer layer 20) wherein said data traffic of said transport layer protocol connection comprises uplink and downlink data traffic that is separately monitored (the Examiner referring to Figure 1 and the associated details including TCP Ctrl. 106), and wherein said uplink and downlink transmission is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic, wherein said uplink and downlink data traffic is at least partially asymmetric, with reference again made by the Examiner to Figure 1 and the associated details. It is further asserted by the Office that the AAPA substantially discloses the invention as claimed above for the foregoing reasons but does not explicitly disclose wherein said monitoring transport layer data traffic transmission capacity of TLP (transport layer protocol) connection, but that Apisdorf discloses this feature, with reference made to the abstract, column 1, line 62-column 2, line 21, Figures 1-4 of Apisdorf, and the associated details. Thus, it is asserted it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the AAPA and Apisdorf to arrive at the claimed invention. Applicant respectfully disagrees.

The references cited by the Office in the aforementioned rejection fail to particularly disclose the features of the independent claims. With respect to the alleged disclosures made in the AAPA, it is asserted by the Office that Figure 1 and the associated details, specifically "wherein transmission service is offered to the TCP layer by the bearer layer 20," disclose: 1) monitoring transport layer data traffic in relation to transmission capacity of a transport layer

protocol connection that uses a data transmission service of a bearer; 2) dynamically adjusting said transmission capacity of said bearer according to said monitored data traffic of said transport layer protocol connection; and 3) wherein said bearer provides uplink and downlink transmission capacity. However, the AAPA does not disclose all of these features, as is asserted by the Office. The present specification at page 4, lines 9-10 (see paragraph [0010] of the published application (US 2005/0102412 A1)) describes where in the “transmission service is offered to the TCP layer by the bearer layer 20,” but does not make any mention of monitoring transport layer data traffic or dynamically adjusting transmission capacity of a bearer according to said monitoring. Although the Office states later in the rejection that the AAPA does not in fact disclose monitoring transport layer data traffic in relation to transmission capacity of TLP connection and relies on Apisdorf for this feature, it is not made clear by the Office where exactly in the AAPA it is disclosed that the transmission capacity of said bearer is dynamically adjusted according to said monitored transport layer data traffic. This showing cannot be made because the AAPA makes no such disclosure, nor has any specific reference within the AAPA been cited that discloses this feature. In addition, considering the admission that the AAPA does not disclose said monitoring, it is unclear where or how the AAPA discloses dynamically adjusting transmission capacity of said bearer *according to said monitored data traffic*.

Furthermore, the Office asserts that Figure 1 and the associated details, specifically “wherein uplink and downlink data traffic is partially asymmetric,” disclose: 1) wherein said uplink and downlink transmission capacity as at least partially separately adjusted according to said monitored respective uplink and downlink data traffic, and 2) wherein said uplink and downlink data traffic is at least partially asymmetric. Although the AAPA does disclose at page 7, lines 6-9 (in paragraph [0016] of the published application) that the uplink and downlink are loaded asymmetrically, the AAPA does not disclose that their transmission capacities are at least partially separately adjusted according to the monitored respective uplink and downlink data traffic.

The fact that these features of the independent claims are not disclosed by the AAPA can be further seen from the discussion beginning at page 6, line 29 through page 8, line 31 (see paragraphs [0015]-[0019] on page 2 of the published application). In the prior art, resource allocation instances can determine the capacity that is required for the uplink and downlink transmission of bearer packets based on the state of the bearer packet buffers in the bearer layer,

not by monitoring a transport layer protocol connection. In many cases, in wireless bearer transmission, there is usually more throughput towards the downlink direction than towards the uplink direction, which is advantageous where the mobile terminal downloads huge amounts of data from the core network and there is less need for capacity in the uplink direction. However, when the mobile terminal starts to send increased amounts of TCP segments towards the uplink direction, transmission of said uplink TCP segments is slowed down due to the limited capacity of the uplink bearer transmission, which results in overflows of the bearer packet buffers and delays in the transmissions in both directions. This problem occurs in the AAPA because the AAPA does not disclose monitoring transport layer data traffic in relation to transmission capacity of a transport layer protocol connection, dynamically adjusting the transmission capacity of the bearer, or wherein the uplink and downlink transmission capacity is at least partially separately adjusted according to the monitored respective uplink and downlink traffic. If that were the case there would be no point to the present application and the applicant could have stopped writing the specification after writing the Background section. The Examiner's conclusions about what the AAPA shows is therefore clearly erroneous.

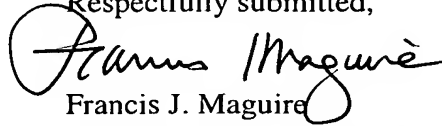
With respect to the Office's assertions regarding Apisdorf as a reference that it supposedly discloses monitoring transport layer data traffic transmission capacity of a transport layer protocol connection, applicant respectfully disagrees and refers to the Amendment and Response filed on October 16, 2008, pages 8-9, where applicant has previously provided reasons for disagreeing. Although Apisdorf does disclose a method for monitoring for errors in higher-layer fields such as internet protocol and transmission control protocol it does not disclose monitoring transport layer data traffic in relation to transmission capacity of the transport layer protocol connection (Apisdorf, column 1, line 62 and column 5, lines 42-45) and such a conclusion is also clearly erroneous as well as inconsistent with the allegations made about the AAPA.

Therefore, because all of the limitations of independent claims 1, 19, 20, and 33 are not met by the references presented by the Office, it is respectfully submitted that a prima facie case of obviousness has not been made and that the claims are in allowable form.

Furthermore, at least in view of their dependency on the aforementioned independent claims, it is respectfully submitted that dependent claims 2-3, 6-16, 18, 21 and 25-32 are in allowable form.

The rejections of the Office Action of July 21, 2008, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 1-3, 6-16, 18-22 and 25-33 to issue is solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Francis J. Maguire". The signature is written in a cursive style with a large, looping initial "F".

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